

## NOTE ON THE SWEET-POTATO LEAF-BEETLE AND A RELATED MEXICAN FORM.

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The occurrence of *Typophorus viridicyaneus* Crotch on sweet potato, according to our records, was first mentioned by J. D. Mitchell, at Victoria, Texas, June 4, 1903. The same year G. H. Harris observed the species on wild sweet potato and on sweet potato and morning-glory or tie-vine at Calvert, Texas.

June 13, 1919, W. A. Thomas, of the Bureau of Entomology, reported injury to sweet potato in Currauck County, N. C., where the beetles were defoliating the plants. Attack was severe, covering about 50 acres in a single field, and the grower was discouraged because of the sudden appearance and numbers of the pest. The beetles clustered in large masses about the crown of the plant and, after defoliating that, gradually spread over the entire vine. In the same fields larvae of the species did considerable damage to the roots.

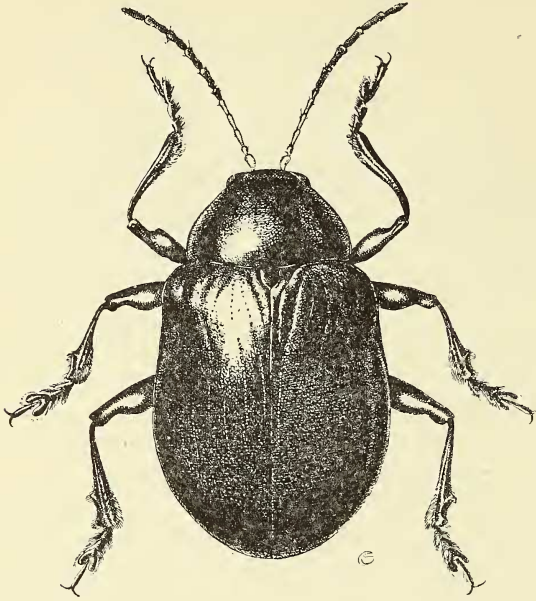
April 26, 1920, M. M. High reported that the larvae had done considerable damage to sweet potato at Kingsville, Texas, during two seasons, the grubs being more active in 1920 than the previous year. Reports also were received from all over the state where sweet potatoes were grown, and from Mississippi, where larvae occurred in injurious numbers. Mr. High wrote that it was feared that if these beetles continued to increase on sweet potato at the rate that they did the previous year, the grower would have another serious insect pest comparable to the sweet-potato weevil with which to reckon. Larvae were observed from September until December, 1919. Attack was also observed to sweet potato by the adults at Harlingen, Texas.

November 12, 1920, George C. Becker reported injury to sweet-potato roots by the larvae of this beetle at Clarksville, Ark., and furnished specimens of the work.

During July, 1924, Philip Luginbil reported the occurrence of the beetles on sweet potato at Columbia, S. C.

This species has been known for many years on wild Convolvulaceae but for some reason does not appear to have been recorded as attacking sweet potato—at least no record is available.

August 10, 1921, when in Mexico, Mr. High obtained *Typophorus sturmi* Lefèvre at Monterey, Nuevo Leon. It was found



in numbers in all sweet potato fields visited and was abundant in two fields, as many as a dozen individuals being taken from single plants. It was feeding on the leaves and stems and depositing eggs in the stalks about the base.

Compared with *T. viridicyaneus*, the elytra are more distinctly and more coarsely striatopunctate, the prothorax is usually more strongly punctate, and the antennae are more slender, especially joints 2 to 5. The lower surface, on the other hand, is less distinctly punctate, but the few scattered hairs proceeding from the scarcely visible punctures are readily seen, whereas they are apparently or nearly absent in the larger species. The size is smaller, 4.5–5.5 mm. in length, while *viridicyaneus* measures 5.5–7.5 mm. The two forms are subject to similar variation in color, from green to blue. In the northern range of *viridicyaneus*, the prevailing color is green; in the South, blue predominates and the majority of specimens of *sturmi* are distinctly blue. While these two forms are very closely related and have been called synonymous by Horn and by Champion, *sturmi* is at least a distinct form, either a subspecies or a species. Because of the close relationship of the two forms and the variability of some of the characters indicated, the Mexican form may be designated conservatively as *Tyrophorus viridicyaneus sturmi* Lefèvre.